

Satyrrium edwardsii (Edwards' Hairstreak)

Priority 2 Species of Greatest Conservation Need (SGCN)

Class: *Insecta* (Insects)

Order: *Lepidoptera* (Butterflies, Skippers, And Moths)

Family: *Lycaenidae* (Gossamer-winged Butterflies)

General comments:

only 5-6 modern EOs; restricted to pitch pine-scrub oak systems.

Species Conservation Range Maps for Edwards' Hairstreak:

Town Map: [Satyrrium edwardsii_Towns.pdf](#)

Subwatershed Map: [Satyrrium edwardsii_HUC12.pdf](#)

SGCN Priority Ranking - Designation Criteria:

Risk of Extirpation:

Maine Status: **Endangered**

State Special Concern or NMFS Species of Concern: NA

Recent Significant Declines: NA

Regional Endemic: NA

High Regional Conservation Priority: NA

High Climate Change Vulnerability: NA

Understudied rare taxa:

Recently documented or poorly surveyed rare species for which risk of extirpation is potentially high (e.g. few known occurrences) but insufficient data exist to conclusively assess distribution and status. *criteria only qualifies for Priority 3 level SGCN*

Notes: only 5-6 modern EOs; restricted to pitch pine-scrub oak systems.

Historical: NA

Culturally Significant: NA

Habitats Assigned to Edwards' Hairstreak:

Formation Name Grassland & Shrubland

Macrogroup Name Ruderal Shrubland & Grassland

Habitat System Name: Ruderal Upland - Old Field **Notes:** *xeric areas where host plant (scrub oak) present*

Formation Name Northeastern Upland Forest

Macrogroup Name Central Oak-Pine

Habitat System Name: Central Appalachian Dry Oak-Pine Forest **Notes:** *potential; where host plant (scrub oak) present*

Habitat System Name: Northeastern Interior Pine Barrens ****Primary Habitat**** **Notes:** *where host plant (scrub oak) present*

Macrogroup Name Northern Hardwood & Conifer

Habitat System Name: Northeastern Coastal and Interior Pine-Oak Forest ****Primary Habitat**** **Notes:** *where host plant (scrub oak) present*

Stressors Assigned to Edwards' Hairstreak:

Stressor Priority Level based on Severity and Actionability	Moderate Severity		High Severity	
	Highly Actionable		Medium-High	
	Moderately Actionable		Medium	
	Actionable with Difficulty		Low	

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IUCN Level 1 Threat Natural Systems Modifications

IUCN Level 2 Threat: Fire and Fire Suppression

Severity: Severe

Actionability: Moderately actionable

Notes: Fire suppression is causing some barrens to succeed to other vegetation types

IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Lack of knowledge

Severity: Moderate Severity

Actionability: Highly actionable

Notes: lack of comprehensive survey effort to identify additional occurrences and monitor status/trends of individual populations

IUCN Level 1 Threat Pollution

IUCN Level 2 Threat: Agricultural and Forestry Effluents

Severity: Moderate Severity

Actionability: Highly actionable

Notes: Nontarget species impacts from aerial pesticides; especially control efforts for gypsy moth in southern ME

IUCN Level 1 Threat Residential and Commercial Development

IUCN Level 2 Threat: Housing and Urban Areas

Severity: Severe

Actionability: Moderately actionable

Notes: Habitat restricted to southern ME where loss and fragmentation to development is on-going

IUCN Level 1 Threat Agriculture and Aquaculture

IUCN Level 2 Threat: Annual and Perennial Non-timber crops

Severity: Moderate Severity

Actionability: Moderately actionable

Notes: Some barren habitat is being converted to intensive blueberry production

IUCN Level 1 Threat Energy Production and Mining

IUCN Level 2 Threat: Mining and Quarrying

Severity: Moderate Severity

Actionability: Moderately actionable

Notes: Barren habitat is often targeted for mining

IUCN Level 1 Threat Residential and Commercial Development

IUCN Level 2 Threat: Commercial and Industrial Areas

Severity: Moderate Severity

Actionability: Moderately actionable

Notes: Habitat restricted to southern ME where loss and fragmentation to development is on-going

IUCN Level 1 Threat Transportation and Service Corridors

IUCN Level 2 Threat: Roads and Railroads

Severity: Moderate Severity

Actionability: Moderately actionable

Species Level Conservation Actions Assigned to Edwards' Hairstreak:

**Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.*

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Conservation Action	Category: Research	Biological Priority: high	Type: new
Prepare a statewide atlas and conservation assessment.			

Stressor(s) Addressed By This Conservation Action

Lack of knowledge

Conservation Actions Associated with the Dry Barrens Lepidoptera Guild:

Conservation Action	Category: Species Management	Biological Priority: critical	Type: new
Prepare occurrence maps and pesticide spray consultation guidelines for rare Lepidoptera and distribute to strategic partners including Maine Bureau of Pesticides Control.			

Stressor(s) Addressed By This Conservation Action

Agricultural and Forestry Effluents

Conservation Action	Category: Habitat Management	Biological Priority: critical	Type: new
Conduct a statewide review of potential high quality barrens habitat that is threatened by succession and identify strategic habitat restoration actions for implementation by key conservation partners.			

Stressor(s) Addressed By This Conservation Action

Fire and Fire Suppression

Broad Taxonomic Group Conservation Actions:

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.